

## SUBSTITUTE SPECIFICATION

Our Reference: VWP 0108 (VWP-514-A)

PATENT

## WIPING DEVICE

BACKGROUND

OK to Enter 6/2005

0001] The invention relates to a wiping device for wiping window glass on vehicles, having a wiper motor, a gear mechanism disposed on the input shaft of the wiper motor, a gear housing enclosing the gear mechanism, a gear housing cover disposed on the gear housing, an output shaft and a crank located rotationally immovable on the output shaft on the side of the gear housing facing away from the gear mechanism. The invention additionally relates to a process for attaching the crank to the output shaft.

0002] According to the generally known prior art, the crank is rotationally immovably secured to the output shaft by means of a threaded connector. To do this, the crank is installed onto the end of the output shaft facing the crank by means of an aperture present in the crank. The output shaft has a threaded section on its end onto which a retaining nut is threaded, by means of which the crank is frictionally connected to the output shaft.

0003] Prior art of this type has the specific disadvantage that the retaining nut in its assembled state lies against the surface of the crank facing away from the gear housing. Because of the retaining nut, it is necessary to configure the crank in such a way that a wiper linkage connected to the crank at the free end of the crank by a swivel head is not obstructed by the retaining nut when the crank is rotating. In this situation, specific provision can be made for the crank to be bent in the direction away from the gear housing. To do this however, an extra bending step is required when making the crank, which is associated with complexity and cost. In addition, a bend of this type in the crank results in an uneven distribution of the compressive and tensile stresses in the crank because of the forces and torque to be transmitted with the crank.

0004] The object of the invention is therefore to propose a wiping device in which a special configuration of the crank is not necessary because of the location of